Summary of Features for Components with Multiple Versions

Some of the hydrologic simulation components in IWFM have multiple versions that offer different simulation capabilities. To aid the user in choosing the right component version, below is a list of these component versions and a summary of the simulation capabilities they offer.

Version	Capabilities
Root Zone Component	
4.0	• Simulation of non-ponded and ponded (rice and managed refuges) crops, urban lands, native and riparian vegetation at each element • Simulation of generic moisture (seepage from extra source of water, fog, etc.) • Ability to deliver water to an element, group of elements or a subregion to meet water demand • Ability to compute physical crop water demand dynamically based on crop, irrigation management, soil and atmospheric conditions or to pre-specify water demand to represent contractual demand
4.1	• All features listed for version 4.0 above • Simulation of riparian vegetation access to stream water to meet all or part of their evapotranspirative water demand • Simulation of root water uptake from groundwater that meets part or all of the plant evapotranspirative demand
Stream Component	
4.0	• Instantaneous routing (storage is not tracked) of stream flow • Wetted perimeter is constant
4.1	• All features listed for version 4.0 above • Simulation of varied wetted perimeter given as a flow vs. wetted perimeter rating table

5.0

- Kinematic wave routing to simulate stream flows and to track storage change in the stream channel
- Simulation of flow in rectangular, triangular and trapezoidal channels
- Flow-stage relationship is represented by the Manning's equation
- Wetted perimeter is calculated as a function of stage and channel geometry